The Truckee River TMDL Collaborative Project

Gayle L. Dana *Desert Research Institute*

Lisa Beutler *Center for Collaborative Policy*

Catherine Olsen *Lahontan Regional Water Quality Control Board*

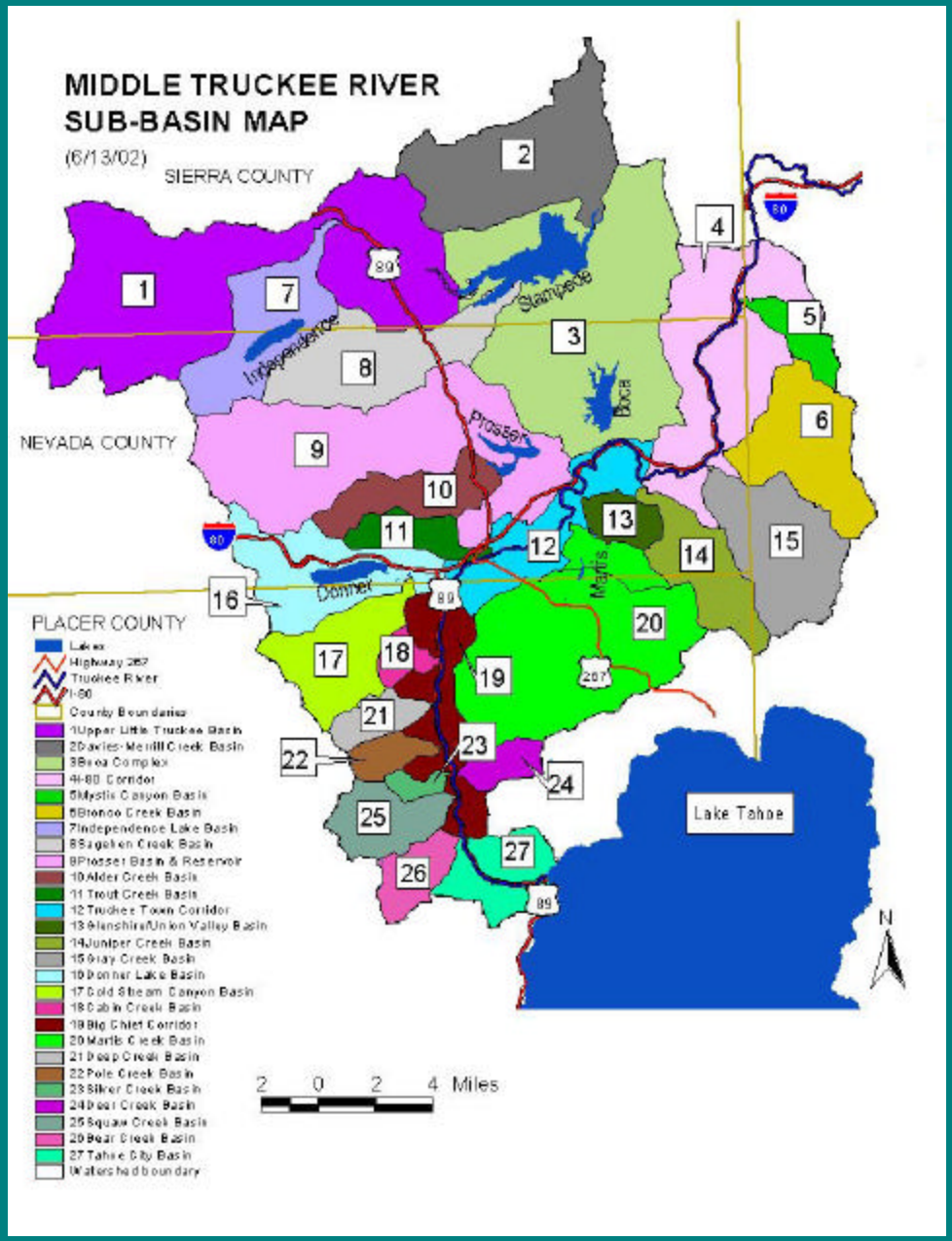
Lisa Wallace *Truckee River Watershed Council*

Goal

Public Participation in TMDL Development

“Middle”
Truckee River Watershed

Sub-basins


MIDDLE TRUCKEE RIVER
SUB-BASIN MAP
(6/13/02)
SIERRA COUNTY
NEVADA COUNTY
PLACER COUNTY
Lake Tahoe
Stampede
Independence
Boca
Prosser
Donner
Martis
Lakes
Highway 267
Truckee River
I-80
County Boundaries
1 Upper Little Truckee Basin
2 Davies-Martin Creek Basin
3 Boca Complex
4 I-80 Corridor
5 Mystic Canyon Basin
6 Bronco Creek Basin
7 Independence Lake Basin
8 Sagehen Creek Basin
9 Prosser Basin & Reservoir
10 Alder Creek Basin
11 Trout Creek Basin
12 Truckee Town Corridor
13 Glenshire/Union Valley Basin
14 Juniper Creek Basin
15 Gray Creek Basin
16 Donner Lake Basin
17 Cold Stream Canyon Basin
18 Cabin Creek Basin
19 Big Chief Corridor
20 Martis Creek Basin
21 Deep Creek Basin
22 Pole Creek Basin
23 Silver Creek Basin
24 Bear Creek Basin
25 Squaw Creek Basin
26 Bear Creek Basin
27 Tahoe City Basin
Watershed boundary
2 0 2 4 Miles
N

Basis for 303 (d) Listing

- High quality of Truckee's waters
- Watershed's sensitivity to disturbance
- Historic legacy of land disturbance
- Repeated impacts on downstream uses
- Increasing frequency of sediment-related complaints and violations

Key Steps for TMDL Collaborative Process

- Decision to Use Collaborative Public Process
- Retain Neutral Facilitator and Neutral Convener
- Engage Steering Committee
- Engage a Design Team
- Stage a Large Group “Launch” of Effort

Public Input

Gather information regarding conditions of the Truckee River

Types of Information Gathered by Stakeholders

- Anecdotal information
- Field Studies
- Modeling Studies

Field Studies: Biota

Effect of Water Quality on Survival of Lahontan Cutthroat Trout Eggs in the Truckee River, West-Central Nevada and Eastern California

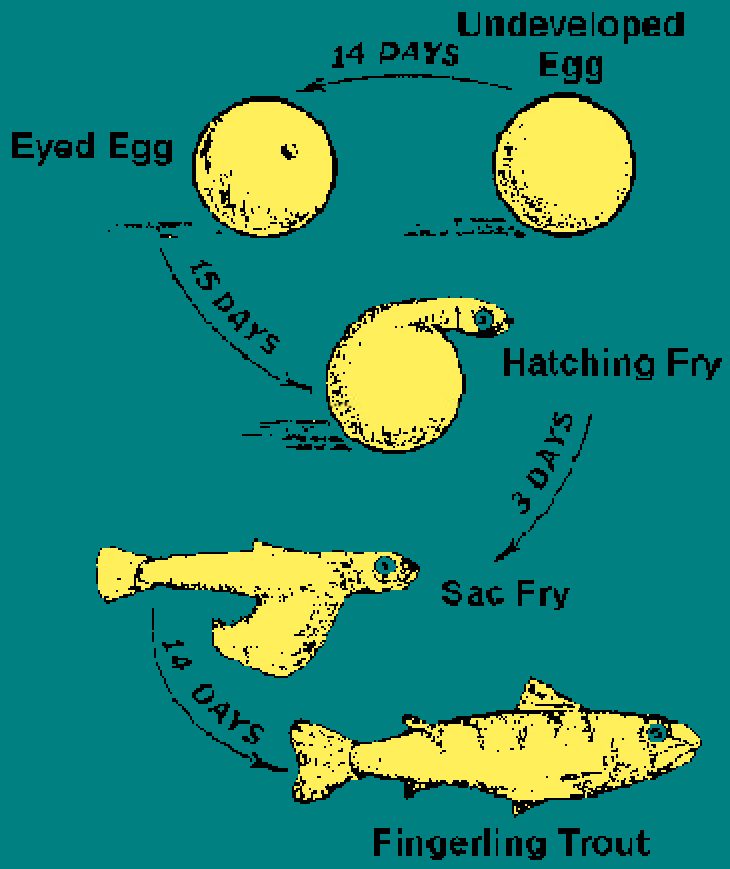
By RAY J. HOFFMAN
U.S. GEOLOGICAL SURVEY

G. GARY SCOPPETTONE
U.S. FISH AND WILDLIFE SERVICE

Prepared in cooperation with the U.S. Fish and Wildlife Service and the U.S. Bureau of Indian Affairs

A product of the River-Quality Assessment of the Truckee and Carson River Basins, Nevada and California

U.S. GEOLOGICAL SURVEY WATER-SUPPLY PAPER 2319



Field Studies: Sediment

Sediment Sampler

Turbidity Sensor

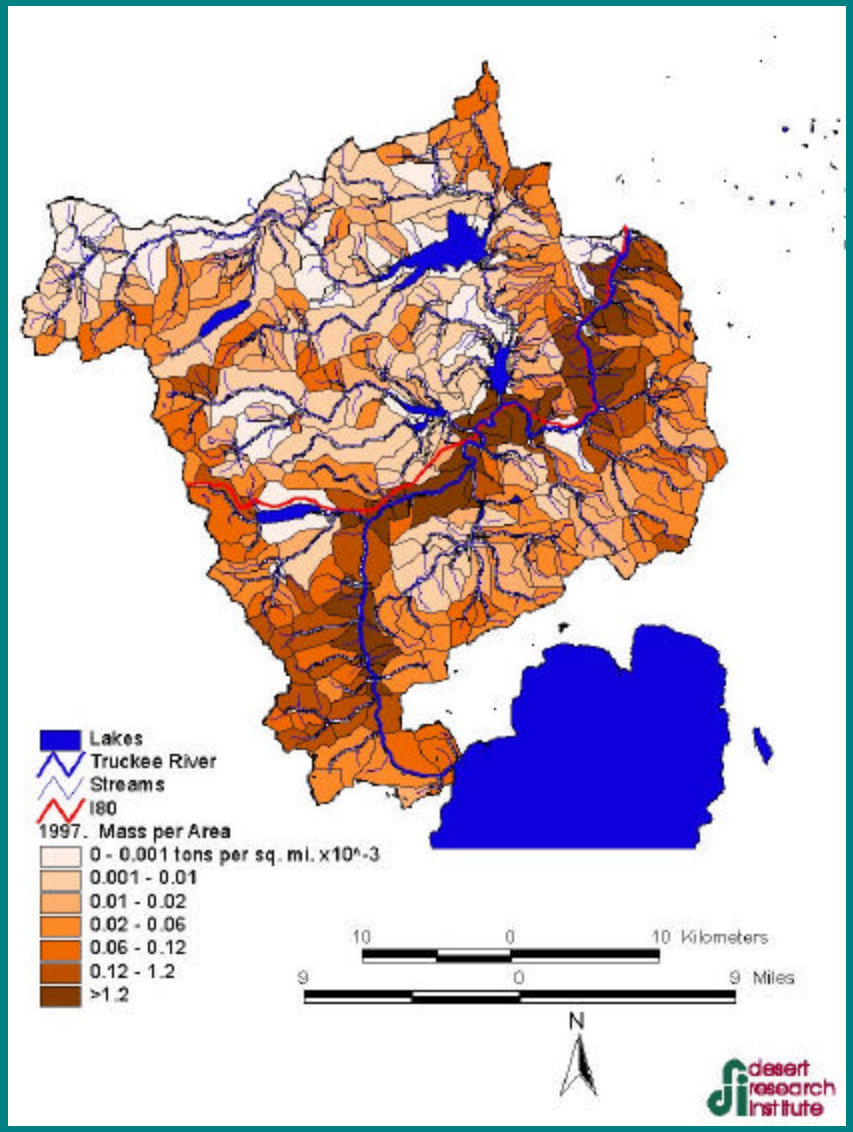
- Sediment Variability
- Sediment Loading
- Sediment Surrogate

Desert Research Institute

Modeling
(DRI, 2001)

1997 Sediment Load
by Subwatershed

Sediment Mass per unit area (tons)



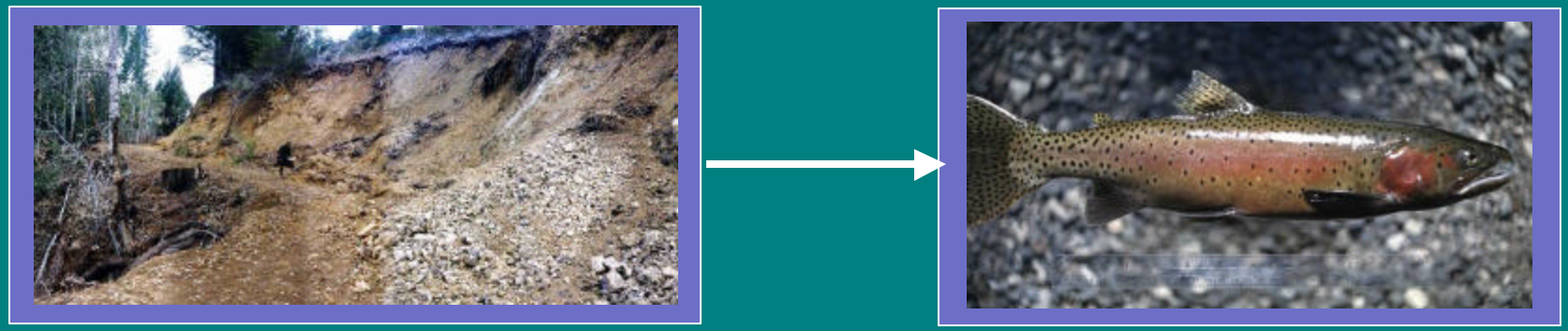
Desert Research Institute

More Public Input

Frame substantive questions regarding science and the TMDL

"Is the river impaired?"

"Where is the evidence?"



Outcomes

- Go/ No Go Process resulted in decision to craft a test TMDL for Stakeholders to respond to.
- First step in Test TMDL: to critically evaluate evidence supporting impairment.
- Conclusion: scientific verification of impairment was lacking.

CRITICAL SUCCESS for the Collaborative Process!!

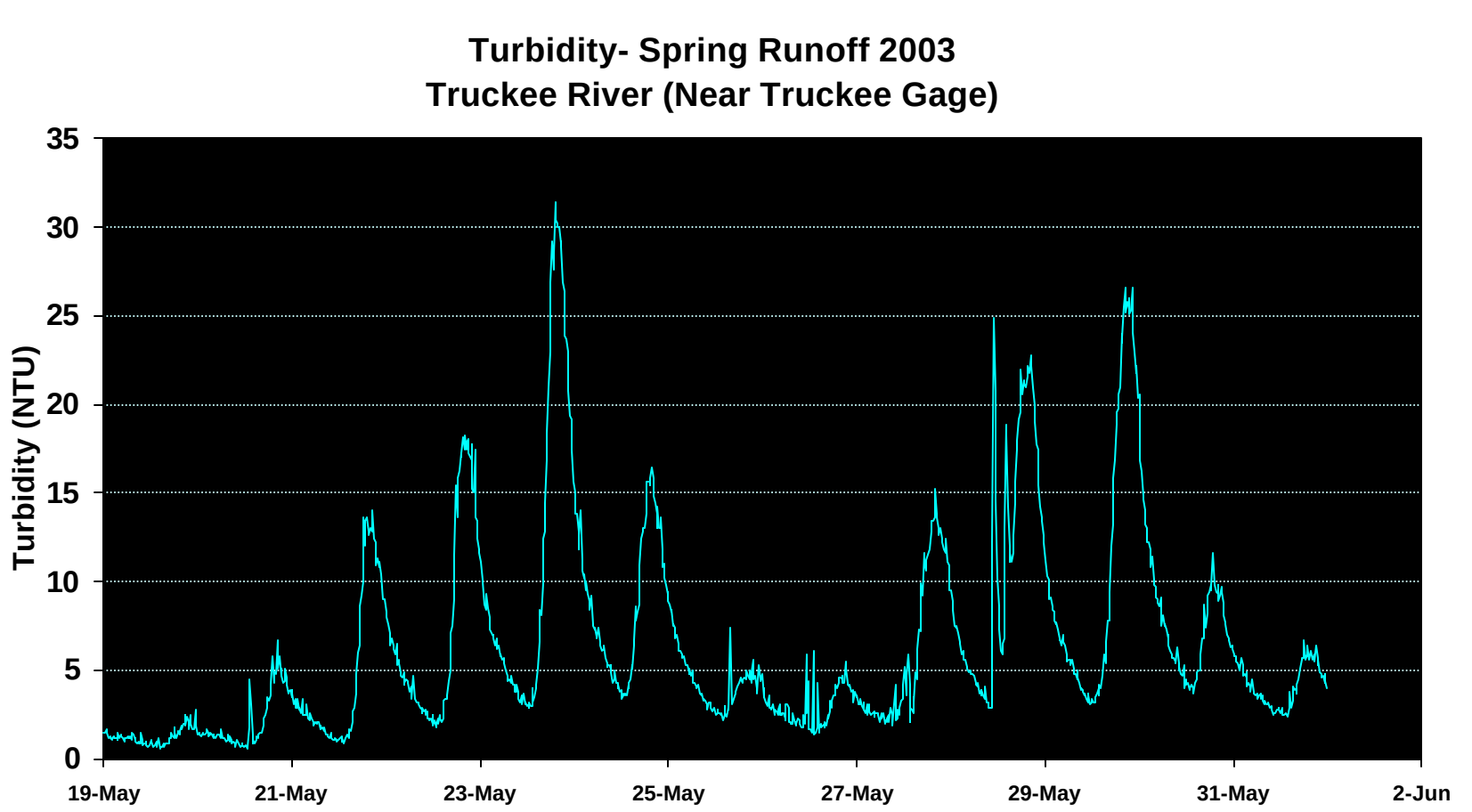
Without stakeholder asking for verification of impairment, Lahontan would have written an administratively correct, but scientifically untenable TMDL

Next Step

Lahontan presently pursuing funding to answer appropriate questions to determine whether beneficial uses of the river are impaired

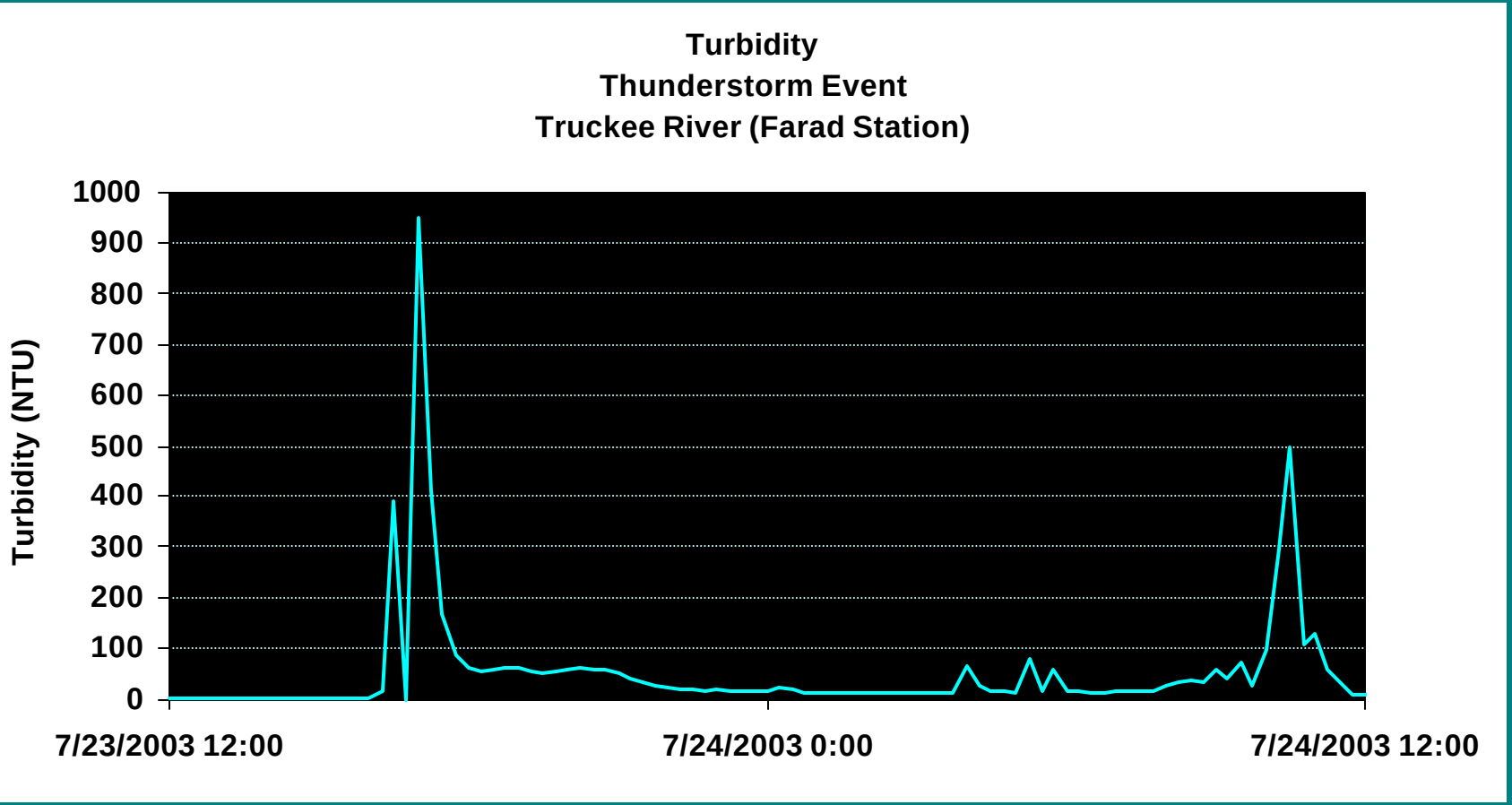
What does the macroinvertebrate species composition of the river tell us?

How Do Elevated Turbidity Events Impact Biota?



Standard for Truckee River is 3 NTU (Mean of monthly means)

How Do Elevated Turbidity Events Impact Biota?

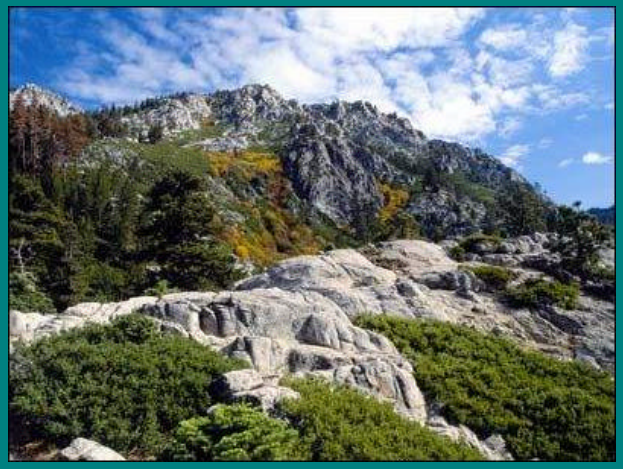


Standard for Truckee River is 3 NTU (Mean of monthly means)

Next Steps for Public Participation

1. Provide feedback on impairment study and other TMDL data

2. If needed, identify the best methods to implement TMDL



What to Consider

- Sponsors
- Assessments
- Stakeholders
- Process Design
- Process Approach
- Decision-Making
- Resources
- Implementation

Lessons Learned - What We Would and Wouldn't Do Different Next Time

Next time we will:

- **Ensure the key stakeholders and sponsors TRULY understand the implications of the conditions for success**
- **Develop stronger role definitions**

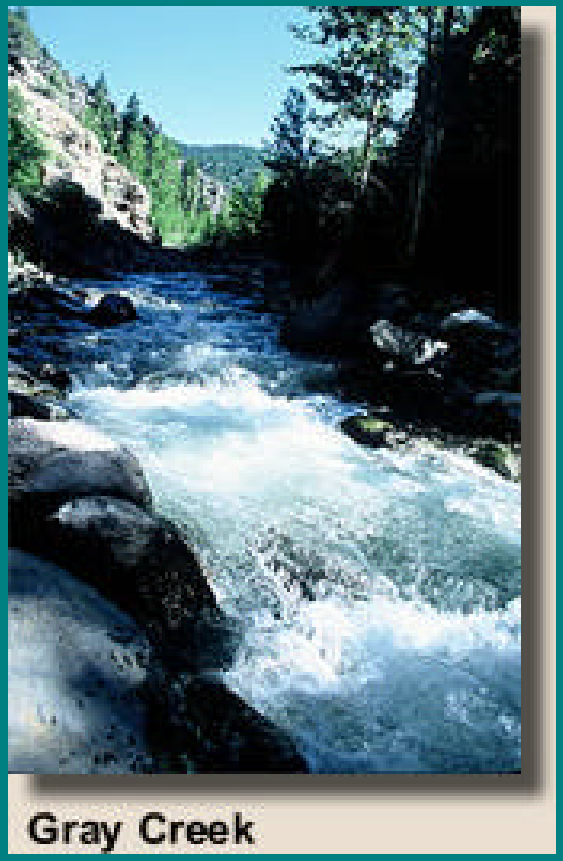
More for next time …

- **Create clearer charges or missions for any public group convened**
- **Create a closer link to data development and the public process**

Things That Worked Well

- **Engaging key community members**
- **Use of a neutral convener**
- **Neutral facilitator/mediator providing trust and safety** *in what would otherwise be a contentious situation*.
- **Large group launch process**

Keeping doing!

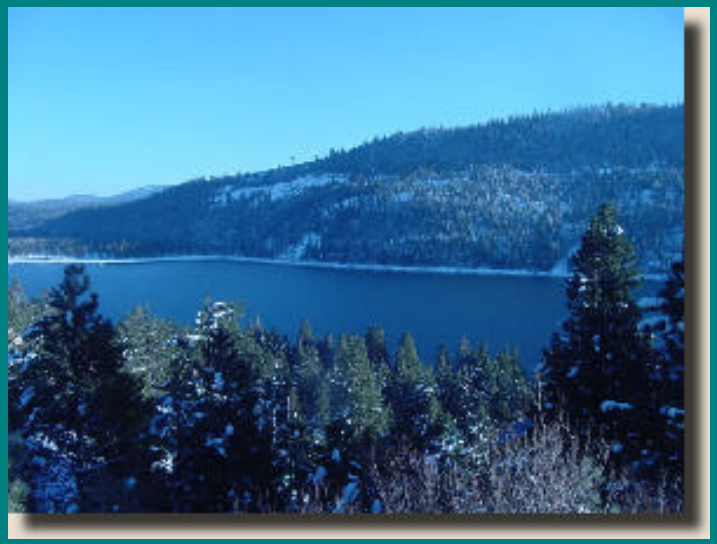

Gray Creek

- Build Go/No Go into process
- Use the public to assist with data collection
- Continue to monitor “conditions for success”
- Keep Goals in mind

CONCLUSIONS

- "Conditions for success" and several best practices can be extrapolated from this case and applied to other situations.

- Based on this case, even limited public participation can add value to development and implementation of TMDLs.



FOR MORE INFORMATION

Gayle L. Dana

Division of Hydrological Sciences

Desert Research Institute, Reno, NV

www.dri.edu/People/gdana/

775-674-7538

gdana@dri.edu

Lisa Beutler

Center for Collaborative Policy

California State University, Sacramento

www.csus.edu/ccp

916-445-2079

lisa-beutler@comcast.net

FOR MORE INFORMATION

Catherine Olsen

Lahontan Regional Water Quality Control Board

CDOlsen@rb6s.swrcb.ca

530-542-5418

www.swrcb.ca.gov/rwqcb6/

Lisa Wallace

Truckee River Watershed Council

Lwallace@truckeeriverwc.org

530-550-8760

http://www.truckeeriverwc.org/